

110TH CONGRESS  
2D SESSION

# S. 2940

To promote green energy production, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

APRIL 30, 2008

Mr. BROWN introduced the following bill; which was read twice and referred  
to the Committee on Energy and Natural Resources

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## A BILL

To promote green energy production, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4       (a) SHORT TITLE.—This Act may be cited as the  
5       “Green Energy Production Act of 2008”.

6       (b) TABLE OF CONTENTS.—The table of contents of  
7       this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.
- Sec. 3. Establishment of program.
- Sec. 4. Green Technology Investment Corporation.
- Sec. 5. Green Technology Investment Fund.
- Sec. 6. Component programs.
- Sec. 7. Criteria for provision of grants, loans, and other assistance.
- Sec. 8. Energy efficiency grants.
- Sec. 9. Administration.
- Sec. 10. Authorization of appropriations.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ADMINISTRATOR.—The term “Adminis-  
4 trator” means the Administrator of the Environ-  
5 mental Protection Agency.

6 (2) BIOMASS.—The term “biomass” has the  
7 meaning given the term “renewable biomass” in sec-  
8 tion 211(o)(1) of the Clean Air Act (42 U.S.C.  
9 7545(o)(1)).

10 (3) ENVIRONMENTALLY PROTECTIVE.—The  
11 term “environmentally protective” means, with re-  
12 spect to technology, technology that—

13 (A) is most likely to result in the least im-  
14 pact to land, forests, water quantity and qual-  
15 ity, air quality, and wildlife habitat; and

16 (B) possesses the highest potential for  
17 long-term sustained production of green energy.

18 (4) GREEN ENERGY.—

19 (A) IN GENERAL.—The term “green en-  
20 ergy” has the meaning given the term “renew-  
21 able energy”.

22 (B) INCLUSION.—The term “green en-  
23 ergy” includes energy derived from coal pro-  
24 duced in a manner that—

1 (i) sequesters carbon from carbon di-  
 2 oxide emissions at a minimum 85 percent  
 3 capture rate on an annual basis; and

4 (ii) complies with section 1421(d) of  
 5 the Safe Drinking Water Act (42 U.S.C.  
 6 300h(d)).

7 (5) INSTITUTION OF HIGHER EDUCATION.—The  
 8 term “institution of higher education” has the  
 9 meaning given the term in section 101 of the Higher  
 10 Education Act of 1965 (20 U.S.C. 1001)).

11 (6) RENEWABLE ENERGY.—The term “renew-  
 12 able energy” means electric energy generated at a  
 13 facility (including a distributed generation facility)  
 14 from solar, wind, fuel cells, biomass, geothermal,  
 15 ocean energy, or landfill gas.

16 (7) SECRETARY.—The term “Secretary” means  
 17 the Secretary of Energy.

18 (8) TARGET AREA.—The term “target area”  
 19 means—

20 (A) an area that has experienced a signifi-  
 21 cant loss of manufacturing employment;

22 (B) an area with a large manufacturing  
 23 capacity;

1 (C) an area with an unemployment rate  
2 that is higher than the national average unem-  
3 ployment rate; and

4 (D) priority for an area that includes a  
5 brownfield site (as defined in section 101 of the  
6 Comprehensive Environmental Response, Com-  
7 pensation, and Liability Act of 1980 (42 U.S.C.  
8 9601)).

9 **SEC. 3. ESTABLISHMENT OF PROGRAM.**

10 The Secretary shall establish a green technology in-  
11 vestment program to develop high-tech green research ca-  
12 pabilities, promote green innovation and green energy in-  
13 vestment, and increase scientific knowledge that may re-  
14 veal the basis for new or enhanced products, equipment,  
15 or processes, in target areas by—

16 (1) assisting in the research and development of  
17 projects that design, create, or formulate new or en-  
18 hanced products, equipment, or processes;

19 (2) expanding and supporting world-class re-  
20 search facilities;

21 (3) supporting capital formation and the devel-  
22 opment of innovative products; and

23 (4) financing advanced manufacturing tech-  
24 nologies to help new and existing industries become

1 more productive, more environmentally protective,  
2 and carbon-neutral.

3 **SEC. 4. GREEN TECHNOLOGY INVESTMENT CORPORATION.**

4 (a) ESTABLISHMENT.—

5 (1) IN GENERAL.—There is established in the  
6 Department of Energy a corporation to be known as  
7 the “Green Technology Investment Corporation”.

8 (2) MEETINGS.—The Corporation shall meet at  
9 least 4 times during each fiscal year.

10 (3) RULES FOR CORPORATION BUSINESS.—Not  
11 later than 1 year after the date of enactment of this  
12 Act, the Corporation shall establish rules for the  
13 conduct of business of the Corporation.

14 (4) APPLICABLE AUTHORITY.—The Corporation  
15 shall be subject to—

16 (A) subchapter II of chapter 5, and chap-  
17 ter 7, of title 5, United States Code (commonly  
18 known as the “Administrative Procedure Act”);  
19 and

20 (B) all other Federal law applicable to  
21 quasi-autonomous agencies within the Depart-  
22 ment of Energy.

23 (5) ADMINISTRATIVE COSTS.—The Secretary  
24 shall—

1 (A) be responsible for paying all adminis-  
 2 trative costs of the Corporation; and

3 (B) in conjunction with the Board of Di-  
 4 rectors of the Corporation, take every reason-  
 5 able action to reduce and minimize administra-  
 6 tive costs of carrying out this section and the  
 7 program.

8 (b) BOARD OF DIRECTORS.—

9 (1) IN GENERAL.—The Board of Directors of  
 10 the Corporation shall consist of 7 members, ap-  
 11 pointed by the President, by and with the advice and  
 12 consent of the Senate, who are—

13 (A) leaders from industry, labor, academia,  
 14 government, and nongovernment organizations;  
 15 and

16 (B) selected based on having the necessary  
 17 expertise—

18 (i) to build world-class applied re-  
 19 search capability;

20 (ii) to assist entrepreneurial  
 21 innovators in accelerating formation and  
 22 attraction of technology-based businesses;

23 (iii) to create product innovation;

24 (iv) to market the manufacturing  
 25 competitiveness of the United States;

1 (v) to create domestic jobs and skills  
2 development opportunities in emerging do-  
3 mestic markets; and

4 (vi) to evaluate and advise on environ-  
5 mental sustainability and climate change.

6 (2) CHAIRPERSON.—The President shall ap-  
7 point, by and with the advice and consent of the  
8 Senate, 1 member of the Board of Directors to serve  
9 as Chairperson

10 (c) TERM OF SERVICE.—

11 (1) IN GENERAL.—Each member of the Board  
12 of Directors shall be appointed for a term of 5 years.

13 (2) ADDITIONAL TERMS.—The President may  
14 appoint, by and with the advice and consent of the  
15 Senate, a member of the Board to serve additional  
16 terms of service.

17 (d) RESPONSIBILITIES.—The Corporation shall allo-  
18 cate funds, provide grants, and carry out programs under  
19 section 6, for all phases of technology commercialization,  
20 in accordance with this Act.

21 **SEC. 5. GREEN TECHNOLOGY INVESTMENT FUND.**

22 (a) ESTABLISHMENT.—There is established in the  
23 Treasury of the United States a fund, to be known as the  
24 “Green Technology Investment Fund” (referred to in this

1 section as the “Fund”), consisting of such amounts as are  
2 appropriated to the Fund under section 10.

3 (b) EXPENDITURES FROM FUND.—

4 (1) IN GENERAL.—Subject to paragraph (2), on  
5 request by the Corporation, the Secretary of the  
6 Treasury shall transfer from the Fund to the Cor-  
7 poration such amounts as the Corporation deter-  
8 mines are necessary to provide grants, loans, and  
9 other assistance, and otherwise carry out programs,  
10 under this Act (other than section 8).

11 (2) ADMINISTRATIVE EXPENSES.—An amount  
12 not exceeding 10 percent of the amounts in the  
13 Fund shall be available for each fiscal year to pay  
14 the administrative expenses necessary to carry out  
15 this Act.

16 (c) TRANSFERS OF AMOUNTS.—

17 (1) IN GENERAL.—The amounts required to be  
18 transferred to the Fund under this section shall be  
19 transferred at least monthly from the general fund  
20 of the Treasury to the Fund on the basis of esti-  
21 mates made by the Secretary of the Treasury.

22 (2) ADJUSTMENTS.—Proper adjustment shall  
23 be made in amounts subsequently transferred to the  
24 extent prior estimates were in excess of or less than  
25 the amounts required to be transferred.



1 **SEC. 6. COMPONENT PROGRAMS.**

2 (a) GREEN DEVELOPMENT LOANS.—The Corpora-  
3 tion shall establish and carry out a loan program to carry  
4 out the purposes described in section 3 (including con-  
5 ducting, or providing for the conduct of, scientific or tech-  
6 nological inquiry and experimentation in the physical  
7 sciences).

8 (b) GREEN MARKETS PROGRAM.—The Corporation  
9 shall establish and carry out a grant program—

10 (1) to assist entities, including entities that are  
11 not eligible for small business innovative research  
12 funding, to receive grants to commercialize green en-  
13 ergy products; and

14 (2) to assist small and medium-sized businesses  
15 with funding to acquire, renovate, or construct facili-  
16 ties or purchase of equipment for—

17 (A) research programs;

18 (B) technology development;

19 (C) product development; and

20 (D) commercialization programs.

21 (c) GREEN REDEVELOPMENT, OPPORTUNITY, AND  
22 WORKFORCE GRANTS.—The Corporation shall establish  
23 and carry out a grant program—

24 (1) to assist small and medium-sized businesses  
25 in accelerating new product development and com-  
26 mercialization of technology products;

1           (2) to assist small and medium-sized businesses  
2           in capitalizing on early-stage investment, particularly  
3           those businesses that provide evidence of a capability  
4           to meet a green marketplace need;

5           (3) to create and maintain jobs within the  
6           United States;

7           (4) to assist local governments in improving in-  
8           frastructure for related businesses in accordance  
9           with this section;

10          (5) to seek and develop innovative ways of as-  
11          sisting businesses and communities in achieving the  
12          goals of this Act;

13          (6) to redeploy underused manufacturing capac-  
14          ity;

15          (7) to capitalize on export opportunities;

16          (8) to revitalize depressed manufacturing com-  
17          munities; and

18          (9) to search for and develop innovative ways to  
19          design environmentally protective technologies and  
20          best practices and demonstrate commercial green en-  
21          ergy production.

22          (d) GREEN ENERGY MANUFACTURING LOANS.—The  
23          Corporation shall establish a program to encourage finan-  
24          cial institutions approved by the Corporation to make  
25          loans to for-profit or nonprofit small businesses that are

1 having difficulty obtaining business loans through conven-  
2 tional underwriting standards.

3 (e) GREEN ENERGY COMMUNITY PILOT PROGRAM.—

4 (1) IN GENERAL.—The Corporation shall estab-  
5 lish a pilot program under which the Corporation  
6 shall provide grants to 5 green energy communities  
7 designated by the Corporation to assist the commu-  
8 nities—

9 (A) to establish models for green energy  
10 communities;

11 (B) to reduce the traditional energy con-  
12 sumption of the communities by using more  
13 green energy and reducing energy consumption  
14 through innovative efficiency programs; and

15 (C) to lower energy costs for consumers  
16 and local government organizations.

17 (2) ELIGIBILITY.—To be eligible for designa-  
18 tion as a green energy community under this sub-  
19 section, a community shall be a target area.

20 (3) DURATION.—

21 (A) IN GENERAL.—The Corporation shall  
22 make grants to green energy communities des-  
23 ignated under this subsection for a term of 10  
24 years.

1 (B) RENEWAL.—Grants made to a green  
2 energy community under this subsection may be  
3 renewed for additional 10-year terms if the  
4 community continues to meet the eligibility re-  
5 quirements of paragraph (2).

6 (f) GREEN ENERGY INSTITUTION OF HIGHER EDU-  
7 CATION PILOT PROGRAM.—

8 (1) IN GENERAL.—The Corporation shall estab-  
9 lish a pilot program under which the Corporation  
10 shall provide grants to 5 green energy institutions of  
11 higher education designated by the Corporation to  
12 assist the institutions of higher education—

13 (A) to establish models for green energy  
14 institutions of higher education;

15 (B) to reduce the traditional energy con-  
16 sumption of the institutions of higher education  
17 by using more green energy and reducing en-  
18 ergy consumption through innovative efficiency  
19 programs; and

20 (C) to lower energy costs for the institu-  
21 tions of higher education and students.

22 (2) ELIGIBILITY.—To be eligible for designa-  
23 tion as a green energy institution of higher edu-  
24 cation under this subsection, an institution of higher  
25 education shall be located in a target area.

1           (3) DURATION.—The Corporation shall make  
2       grants to green energy institutions of higher edu-  
3       cation designated under this subsection for a term of  
4       10 years.

5       (g) NATIONAL GUARD BASE GREEN ENERGY GRANT  
6 PILOT PROGRAM.—

7           (1) IN GENERAL.—The Corporation shall estab-  
8       lish a pilot program under which the Corporation  
9       shall provide grants to 5 States for green energy  
10      National Guard bases designated by the Corporation  
11      to assist the National Guard bases in those States—

12                (A) to establish models for green energy  
13      National Guard bases;

14                (B) to reduce the traditional energy con-  
15      sumption of the National Guard bases by using  
16      more green energy and reducing energy con-  
17      sumption through innovative efficiency pro-  
18      grams; and

19                (C) to lower energy costs for the National  
20      Guard and States.

21           (2) ELIGIBILITY.—To be eligible for designa-  
22      tion as a green energy National Guard base under  
23      this subsection, a National Guard base shall be lo-  
24      cated in a target area.

1           (3) DURATION.—The Corporation shall make  
2       grants to green energy National Guard bases des-  
3       ignated under this subsection for a term of 10 years.

4       (h) GREEN ENERGY TECHNOLOGY INTERNSHIP PRO-  
5       GRAM.—

6           (1) IN GENERAL.—The Corporation shall estab-  
7       lish a green energy technology internship program  
8       under which—

9           (A) students and educators at colleges and  
10       universities in the United States are paired  
11       with businesses of all sizes in the United States;  
12       and

13          (B) those businesses are encouraged—

14           (i) to develop cutting-edge, high-tech  
15       skills in participating students; and

16           (ii) to ultimately offer full-time em-  
17       ployment to those students after gradua-  
18       tion.

19          (2) GOAL.—The Corporation shall establish as  
20       a goal for the green energy technology internship  
21       program the reimbursement by the Corporation, of  
22       not more than the greater of 50 percent or \$5,000  
23       of the wages paid to a participating student or edu-  
24       cator, on the condition that, in the case of a partici-  
25       pating student, the business strives for the possi-

1 bility of full-time employment of the student after  
2 graduation.

3 (3) REQUIREMENTS.—The Corporation shall es-  
4 tablish requirements for participation in the green  
5 energy technology internship program, including re-  
6 quirements relating to—

7 (A) the eligibility of students, educators,  
8 and businesses to participate in the program;  
9 and

10 (B) application contents and procedures.

11 (i) GREEN ENERGY TECHNOLOGY APPRENTICESHIP  
12 PROGRAM.—

13 (1) IN GENERAL.—The Corporation shall estab-  
14 lish a green energy technology apprenticeship pro-  
15 gram under which—

16 (A) apprentices and employers in the  
17 United States are paired with businesses of all  
18 sizes in the United States; and

19 (B) those businesses are encouraged—

20 (i) to develop cutting-edge, high-tech  
21 skills in participating students;

22 (ii) to ultimately offer full-time em-  
23 ployment to those students after comple-  
24 tion; and

1 (iii) to work closely with organized  
2 labor.

3 (2) GOAL.—As a goal for the green energy  
4 technology apprenticeship program, the Corporation  
5 shall, to the maximum extent practicable, provide re-  
6 imbursement for not more than the higher of 50  
7 percent or \$5,000 of the wages paid to a partici-  
8 pating apprentice, if the business paired with the ap-  
9 prentice agrees to make every effort to offer full-  
10 time employment to the apprentice on the comple-  
11 tion of the apprenticeship.

12 (3) REQUIREMENTS.—The Corporation shall es-  
13 tablish requirements for participation in the green  
14 energy technology apprenticeship program, including  
15 requirements relating to—

16 (A) the eligibility of apprentices, organized  
17 labor, trades, and businesses to participate in  
18 the program;

19 (B) partnerships with organized labor ap-  
20 prenticeship programs; and

21 (C) application contents and procedures.

22 **SEC. 7. CRITERIA FOR PROVISION OF GRANTS, LOANS, AND**  
23 **OTHER ASSISTANCE.**

24 (a) ELIGIBLE PROJECTS.—



1           (1) IN GENERAL.—The Corporation shall pro-  
2       vide grants, loans, and other assistance in accord-  
3       ance with the programs under section 6 for projects  
4       that, as determined by the Corporation—

5                   (A) offer the best technology, research, and  
6       commercialization for the United States;

7                   (B) permit anticipation and action on mar-  
8       ket opportunities;

9                   (C) encourage industry involvement;

10                  (D) facilitate investment at the intersec-  
11       tion of core competency areas;

12                  (E) recruit world-class talent and high-  
13       growth companies;

14                  (F) create economic opportunity for target  
15       areas;

16                  (G) engage regional partners;

17                  (H) emphasize accountability and metrics;

18                  (I) upon completion, will serve as sites and  
19       facilities primarily intended for commercial, in-  
20       dustrial, or manufacturing use; and

21                  (J) advance environmental protection.

22           (2) PRIORITY.—In carrying out paragraph (1),  
23       the Corporation—

24                   (A) shall give priority to—

1 (i) renewable energy, carbon-neutral  
2 projects; and

3 (ii) projects that advance environ-  
4 mentally protective goals, with a particular  
5 emphasis on best practices and innovative  
6 technology that reduce negative impacts on  
7 a commercial scale; and

8 (B) may consider and give priority to the  
9 potential of a project to develop or improve in-  
10 novative, cutting-edge technology for green en-  
11 ergy projects that are carbon neutral.

12 (b) BASIS.—A grant, loan, or other assistance pro-  
13 vided under this Act—

14 (1) shall be based on the best available tech-  
15 nology, research, and commercialization, with a  
16 focus on diversity of green technologies; and

17 (2) shall not be provided solely on a geo-  
18 graphical basis.

19 (c) ELIGIBLE APPLICANTS.—The Corporation may  
20 provide a grant, loan, or other assistance under this Act  
21 to—

22 (1) a political subdivision or nonprofit economic  
23 development organization;

1           (2) a municipality, local government, commu-  
2           nity, or institution of higher education (including a  
3           technical educational institution); and

4           (3) a private, for-profit entity, with the unani-  
5           mous approval by the Board of Directors of the Cor-  
6           poration.

7           (d) FUNDS ALLOCATED.—The Corporation shall de-  
8           termine the maximum and minimum amount provided for  
9           each program and program recipient under this Act in  
10          order to maximize the purposes of this Act.

11          (e) REPORT.—Not later than 1 year after the date  
12          of enactment of this Act, and annually thereafter, the Cor-  
13          poration shall submit to Congress a report that describes  
14          all activities of the Corporation carried out using funds  
15          made available under this Act, including, for the year cov-  
16          ered by the report, a description of—

17                (1) each grant, loan, or other award of assist-  
18                ance provided under this Act; and

19                (2) the reason for each grant, loan, or other  
20                award.

21   **SEC. 8. ENERGY EFFICIENCY GRANTS.**

22          (a) IN GENERAL.—The Secretary shall establish an  
23          energy efficiency grant program under which the Sec-  
24          retary shall provide grants to eligible recipients, on a dol-  
25          lar-for-dollar matching basis, for implementing conserva-

tion programs that are designed to reduce consumer energy use to the maximum extent practicable.

(b) ELIGIBLE RECIPIENTS.—Recipients that are eligible to receive grants under this section include—

- (1) energy producers;
- (2) municipal power organizations; and
- (3) rural electric cooperatives.

(c) PRIORITY.—In making grants under this section, the Secretary shall give priority to programs that are designed to reduce consumer end-use of energy over programs that are designed to reduce the consumer use of energy.

(d) REDUCTION IN ENERGY USES.—In making grants under this section, the Secretary shall allocate grants, and provide minimum and maximum award criteria for the grants, in a manner that maximizes the reduction in energy use.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$150,000,000 for each of fiscal years 2009 through 2013.

## **SEC. 9. ADMINISTRATION.**

Notwithstanding any other provision of this Act, none of the funds made available to carry out this Act may be used to carry out any project, activity, or expense that is not located within the United States.

1 **SEC. 10. AUTHORIZATION OF APPROPRIATIONS.**

2       There are authorized to be appropriated to the Fund  
3 to carry out this Act (other than section 8), to remain  
4 available until expended—

5           (1) \$1,000,000,000 for fiscal year 2009;

6           (2) \$5,000,000,000 for fiscal year 2010; and

7           (3) \$10,000,000,000 for each of fiscal years  
8       2011 through 2013.

○